Environmental Management "Start of Year" Review Waste Management Integration

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Waste Management Progress

CH Objectives

- Eliminate all legacy waste
- Enable waste operations
- Meet cleanup waste ramp-up challenges
- Restructure P2 program to meet meaningful objectives.

FY 2001 Legacy Waste Progress

- BNL liability waste incorporated into Boneyard PBS.
  - Midyear plan was to dispose over next 4 years
  - All hazardous waste worked off (783mt)
  - 520 cubic meters LLW disposed (112 cm left)
  - 180 cubic meters mixed waste shipped (23 cm left)

- ANL liability waste under EM for CH-TRU, SC for remainder
  - TRU vendor on site, characterization behind schedule
  - No path to WIPP yet for RH-TRU
  - Remaining waste accelerated, was about 10,000 cu ft.
  - All PCB mixed waste disposed
  - Lead waste shipped
  - Good progress on LLW

Enable Waste Operations

- Post EM waste operations running smoothly
  - No budget shortfalls, savings reinvested
  - As legacy inventories and routine waste generation reduced, labs being pushed to reduce resources
  - BNL shows good improvement on waste operations/cleanup coordination
- Progress on providing tools and outlets for waste
  - OR and OH Envirocare contracts used for LLW/MLLW disposal
  - Use of TMWFA to assist on unique wastes
  - First CH site certified for NTS
  - Information sharing on available commercial capabilities
- FY 03 challenge
  - SC still plans on eliminating WM direct funding
  - Impacts to EM unknown

Enable Waste Operations

Shipping Security

- Events of September 11 have presented challenges for waste shipments from all CH sites.
- All CH sites conforming to EM and SC checklists for LLW/MLLW shipments.
- BNL has special requirements for shipments due to its location.
- Shipments since September 11:
  - Nearly 60,000 cu. ft. shipped
  - Only two minor glitches:
    - PPPL/NTS truck stopped in PA over Holiday
    - BNL OWT

Meeting Waste Ramp-Up Challenges

Restoration/D&D waste generation will exceed 250,000 cu ft per year for CH sites - compared to routine generation of less than 25,000 cu ft per year.

- Costs of processing waste once generated have exceeded $500/cu ft or more.
- Overall goal is to decrease costs to $75/cu ft or less.
- Tools being employed:
  - Economies of Scale
    - Consolidation of shipments at a site
    - Centralized approaches for contracts, containers, and transportation
  - Timing
    - Shipments coincide with Ohio soil
  - Alternatives
    - Rail shipments to Hanford
    - NTS evaluation
    - Risk based “free release” approaches

P2 Program Restructuring

- CH working internally and with EM-22 and SC to restructure P2 Program
  - Current Numerical Goals don't translate well at sites
  - P2 has a bad name
  - Site employees and managers don't relate to P2 well.
- New approach is to divide P2 program into 3 area of emphasis:

① Reduce Cleanup Costs Through Waste Reduction

- ✧ End state is minimal processing and disposal
- ✧ Use risk based approaches for cleanup limits, green remediation, partner with OST
- ✧ Tools: in-situ remediation, reuse, innovative decon, precision excavation, free-release, natural attenuation, sorters, etc.

P2 Program Restructuring

② Increase Safety/Decrease Costs of Business Through Current Waste Reduction

- End state is Zero Waste Generation (Let's put waste ops out of business)
- Strategy is to fully integrate with programs, increase site and program accountability for waste, emphasize cost benefit of waste reduction, fully integrate into ISM and ISO 14001, target classes of hazards/toxics, source and isotope management, relate to overhead/infrastructure cost reduction, etc
- Tools: Materials Exchange, PPOAs, PWAs, contract measures, R2A2s, technical centers, etc.

③ Eliminate Future Environmental Liability

- End state is minimal LTS, no potential for future EMs
- Strategy is to emphasize Green Sites through design, infrastructure life cycle cost reduction, technology development for a green future, full integration of waste into LCAM, etc.
- Tools: Green Design, SERDP and beyond, closed loop systems, Infrastructure Initiative, etc.

Special Issues

- Concern over waste vendor availability and stability
  - ATG closed doors
    - fate of over 1.5 million pounds of waste up in the air.
    - Replanning of ATG work at BNL
    - Future treatment destinations up in the air
    - Cask shipments being replanned
    - Ripple effects on other vendors
  - Other vendors are overloaded with ORO, SR, RF, OH wastes
  - Many vendor plans continue to fail to materialize
- Complex-wide help is fading
  - Risk Center, EMI, LLW/MW COE, etc
  - Fate of EM-50?? P2?? Other Centers??
  - DOE sites need information exchange